



Assets

Planon Software Suite

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About this Document

Intended Audience

This document is intended for *Planon Software Suite* users.

Contacting us

If you have any comments or questions regarding this document, please send them to: support@planonsoftware.com.

Document Conventions

Bold

Names of menus, options, tabs, fields and buttons are displayed in bold type.

Italic text

Application names are displayed in italics.

CAPITALS

Names of keys are displayed in upper case.

Special symbols



	Text preceded by this symbol references additional information or a tip.
	Text preceded by this symbol is intended to alert users about consequences if they carry out a particular action in Planon.

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About Assets

The Assets TSI enables you to register and retrieve data of your company's assets, such as installations, systems, furniture and other assets.

The Assets TSI helps you to locate each individual asset in a property and provides information on when it needs to be maintained or replaced. The assets concerned are always linked to a property and classed into logical groups.



Starting from Planon Live release L77, it is recommended to use the new Assets Pro TSI, instead of the Assets TSI. The new TSI is an enhanced and extended version of the original TSI, integrating asset management data with maintenance and service information in a single hub. This includes information about: maintenance, orders, contracts, health & safety, and observations. If you decide to start using the Assets Pro TSI, it is recommended that you familiarize yourself with its structure. Your Planon administrator can configure any relevant new levels and steps in accordance with your requirements. The available data from the database will be shown accordingly. For more information see [About Assets Pro](#).



The current information in the *Assets* user documentation is based on the structure of the original TSI, which implies that the location of selection levels or steps in the new TSI might deviate from the description in the procedure you are following. See [Assets Pro TSI compared with the Assets TSI](#) for information about levels and steps.

About Assets Pro

The **Assets Pro** TSI is an extended version of the regular **Assets** TSI. The design of this extended TSI ensures that you can navigate quickly and easily to all relevant asset information within one central hub. With the new TSI, navigating to other TSIs to find an asset-related data such as maintenance activities, orders or contracts, for example, is no longer necessary.

The new Assets Pro TSI harbors all asset-related functionality that you are already familiar with, but it also includes additional levels and steps. The main reason for extending the TSI is to cater for users that are primarily involved in asset maintenance. This also includes service provider organizations.



Planon users who have activated the Service Provider solution mode, will have some specific service provider levels and steps available, for example to support the outsourcing of work to subcontractors.

With the **Assets Pro** TSI, you will have immediate access to all relevant asset and maintenance information in a single location. The following section provides information on the structure of this new TSI.

Assets Pro TSI compared with the Assets TSI



The levels and steps that are bolded are either new or have been moved to Assets Pro .

Selection levels - new and existing TSI compared

Levels in new Assets Pro TSI	Levels in existing Assets TSI
Customers (Service Providers only)	
Properties	Properties
Filters	Filters
Assets	Assets
Asset details	Asset details
Activity details	Activity details
Maintenance	Activities / registrations
Maintenance details	Activity details
Activity details	
History	

Selection levels and steps Assets Pro TSI

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
Customers (Service Providers only)	Customers	Level is used to filter the assets on the third level
Properties	Properties	Level is used to filter the assets on the third level

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
Filters	<ul style="list-style-type: none"> • Asset groups • Asset classifications • Technical classifications • Cost centers • Departments • Asset system status • Asset user status • Spaces (filtered by Property; assets filtered by selected Space(s)) • Contracts (filtered by Property and Customer; assets filtered by selected Contract(s)) • History - properties • Communication logs 	Level is used to filter the assets on the third level


Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
Assets	<ul style="list-style-type: none"> - properties • Assets • Communication logs - contracts 	Level is used to filter the business objects on the subsequent levels
Asset details	<ul style="list-style-type: none"> • Assets locations • Parent assets • Dependent assets • Related assets • Components • Purchases • Replacements • Knowledge base items • Meters • Contract lines • Service agreements (Service Providers only) • History <ul style="list-style-type: none"> - assets • Communication logs <ul style="list-style-type: none"> - assets 	History steps must be manually added to the next level, except history on property. Communication log steps are automatically added to the next level.
Maintenance	<ul style="list-style-type: none"> • Orders (reactive 	

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
	<p>and planned maintenance)</p> <ul style="list-style-type: none"> • Asset service plans • Standard service plans • Contract service plans • Service plans • Meter readings • Asset conditions • Observed defects • Aggregated topic scores • Assessments • Observations • Hazards • Business events (Decision model) • History <ul style="list-style-type: none"> - asset locations • Communication logs <ul style="list-style-type: none"> - contract lines 	

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
Maintenance details	<ul style="list-style-type: none"> • Condition details • Asset activity definitions • Standard activity definitions • Contract activity definitions • Survey activity definitions • Maintenance activity definitions • Maintenance activities • History and Communication log steps from business objects on previous level 	
Activity details	<ul style="list-style-type: none"> • Condition detail updates • Expected costs (various steps per activity definition type) 	

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
History	<ul style="list-style-type: none"> • Checklist items (various steps per activity definition type and maintenance activities) • Outsourced activities definitions (Service Providers only) • History and Communication log steps from business objects on previous level • History - expected costs (various steps per activity definition type) • History - checklist items (various steps) 	

Levels in Assets Pro TSI	Steps in Assets Pro TSI	Info on behavior or configuration
	per activity definition type and maintenance activities)	

 As of release L97, the **Assets PRO** TSI has been extended with the new type of 'Activity definition' that is related to the upcoming 'Objective-based maintenance project' (AMM 3.0). While the related selection levels and steps are currently visible, they are not yet operational. Once the new solution is released, you will be able to configure and utilize the **Activity definition** selection steps.

Assets - Concepts

This section describes the concepts available in the Assets TSI and how they interact with each other.

Assets

Assets can be all kinds of corporate items of value, from furniture to mechanical installations, or from company clothing to company cars. They always belong to a specific property and asset group.

Assets are hierarchical elements. That means that they can be subdivided into different levels. The maximum number of levels is 10. Using a hierarchical structure for assets, enables you to specify any subassets of which an asset may consist. For example, you can register a pump via the components it consists of.

The data you can register for an asset include purchase data, location data and replacement data. You can also specify whether the asset is a simple or a multiple asset. For each asset, you can define a service plan that includes all the activities needed for the asset's preventative maintenance.

Multiple assets

Identical assets can be registered as a *multiple asset*. This type of registration is also possible if the multiple asset is scattered over different properties and locations. This prevents repetitive data registration, as you only need to enter one asset record. For example, if you have registered 100 identical office chairs as a multiple asset, which is distributed over several rooms or buildings, you can assign different locations to the individual assets or clusters of assets (at Asset details > Asset locations).

You can register a multiple asset by selecting **No** in the **Assets > Simple** field.

You can also register information on the purchase of an asset. You can link one purchase to a simple asset and several purchases to multiple assets.

Building elements

An essential component of a building that protects the building occupants and whose quality affects the indoor environment.

Examples: roofs, doors, floor slabs, walls, and windows.

Building elements require condition-based maintenance. Building elements are added at the **Assets** selection level in Assets TSI.



In **Asset Library**, you can search by code for standard assets and standard building elements by using the magnifying glass icon at the top right of your screen or simultaneously pressing **CTRL+<space>**.

Configuration items

A configuration item (CI) is an asset or a service that depends on or/and has a relation with other assets and services in Planon.

Asset and CI mean the same, but the usage of the terminology may differ, depending on the work environment. The term *asset* is mainly used in the Facility Management area and the term CI is widely used in the ITSM area.

Asset groups

Asset groups are used to categorize assets into logical groups such as Mechanical, Electrical, Furniture etc. An asset group has a hierarchical structure, which may have a maximum of 10 levels. An asset group is not linked to a particular property, so the classification into groups is the same for all properties.

Asset classification

A functional and hierarchical grouping of assets that requires planned preventative maintenance. The individual items in the asset classification have their own descriptions and codes.

Asset classifications are added and maintained in Supporting data or in Assets . You can use different methods of asset classification for different types of assets. Example: Roofs, Ceilings, Walls, Lighting, Security etc.

Asset service plans

If you do not intend to use the **Maintenance library**, you can use *asset service plans* to define your asset maintenance. An asset service plan is directly linked to the asset and can be used in the **Maintenance Planner** TSI when setting up planned maintenance. However, if a service plan should apply to larger amounts of assets or groups of assets, it may be a more efficient solution to use *standard service plans* from the **Maintenance library**.

Asset service plans are added in Assets > **Asset details** > **Service plans**. An asset service plan includes all maintenance activity definitions for a particular asset.



For more information on adding data for an asset service plan, see [Adding a service plan](#).

Asset activity definitions

A 'template' that contains detailed data on the preventative maintenance of a particular asset.

Asset activity definitions are linked to an asset via an asset service plan. Asset activity definitions are used in the **Maintenance Planner** TSI when setting up a maintenance plan.



For more information for on adding data for an asset activity definition, see [Activity definitions fields](#).

Asset and building element statuses

Assets and building elements can exist in various statuses. The possible status transitions available to an asset or building element depend on their current status.



For details on how to change an asset's or building element's status, see [Changing an asset's or a building element's status](#). For a description of the available statuses, see [Asset and building element statuses](#).

Assessments

Assessments of corporate assets can provide insights into the risks and opportunities for your enterprise and help you make value-based decisions.

Currently, there are 4 types of assessment you can add to an assessment definition; 1 generic type and 3 specific types:

- General assessment
- Property assessment
- Space assessment
- Asset assessment

All types can either be 'document driven' or 'questionnaire driven'. This depends on your assessment definition.



You can add assessments to an assessment definition at the **Assessments** selection step, in the **Assessments** TSI. Additionally, an **Assessments** step can be configured for specific assessment types in related TSIs. For example: in the **Assets** TSI, at **Asset details**, you can add an **Assessments** step where asset assessments can be viewed. Similarly, you can add a step in the **Property details** TSI, at **Property details** for property assessments. The **Assessments** selection steps in related TSIs show the assessments for an asset or property. For further assessment details you can navigate to the **Assessments and observations** TSI.

Communication logs

Communication logs are records of communication regarding an item that is added to Planon ProCenter . These records are added manually in the respective TSIs and they can include all types of communication such as emails, faxes, reports, transcriptions of phone calls and so on.

You can upload documents as reference or even include a link to a URL, which will always open in a separate browser window.

Communication logs can be added for many elements, for example orders (all order types), properties, visitors, budgets, invoices, and so on.


For communication logs that were automatically created for alerts or forms through the **Log to communication log** field, the **Action** field will be updated to reflect the source. For more information, see [Communication log fields](#).

 You can create an action definition in Alerts to automatically delete communication logs based on a schedule.

Components


Individual components that can be registered for an asset. Components are given a sequence number instead of a code. An example of an asset component is the hard disk of a personal computer.

You can add asset components on the **Asset details > Components** selection step. It is not possible to register components for building elements.

 In the **Asset Library**, you can also add components to standard assets.

Contract service plan


A **contract service plan** is a complete contractual maintenance package that applies to one or more assets or building elements. Contract service plans must be created **Contracts** TSI.

 You can link assets to contract service plans in the **Assets** TSI and - vice versa - in the **Contracts** TSI. In either case, the appropriate **Link** action must be added to the action panel. For more information on contractual maintenance, see [Contractual maintenance](#) and [Linking assets to a contract service plan](#).

Counters

Counters enable you to analyze an asset's consumption. For example: energy consumption.

The ways in which the consumption should be calculated or the counting method itself may vary. To illustrate: a copier counter is ascending, but a fuel tank counter is descending.

 In Planon ProCenter , counters can be added and linked to assets in the Meters TSI. For more information, see [Meters](#).

Expected costs

There are three types of costs: additional costs, material costs and labor hour costs. The cost lines of the activity definition are used to calculate the actual costs of the ensuing maintenance orders.

You can add expected costs to an activity definition at Activity details > Expected costs.

 For details, see [Adding expected costs to a maintenance activity definition](#).

Filters level

The various steps on the **Filters** level in the **Assets** TSI will help you to navigate directly to the assets that match your specific query.

At the **Filters** level, you can select steps to navigate to a specific subset of assets. The following asset related steps can be configured here:

- Asset groups
- Asset classifications
- Technical classifications
- Cost centers
- Departments
- Asset system status
- Asset user status
- Spaces
- Contracts
- Communication logs
- History

Knowledge Base items

Frequently recurring ICT or workplace management problems, together with their symptoms and solutions, can be added to Planon ProCenter as knowledge base items in the Knowledge Base TSI. In Assets you can subsequently retrieve the knowledge base items that are linked to assets. This enables you to easily refer to frequently occurring problems, symptoms and solutions associated with an asset. You can also add new knowledge base items to assets from within Assets .

Locations

Locations help you track down the property and space where an asset is located. Since multiple locations can be linked to multiple assets, you can register all the different spaces where (clusters of) multiple assets are located. The number of individual assets present can be specified for each location.

Parent assets and dependent assets

You can link two assets together and specify which one of them is dependent on the other in order to function correctly. This is used for the purpose of configuration management.

It makes it possible in an IT system for example, to analyze the impact of a malfunctioning parent asset.

You can add a server as a parent asset and then link it to a workstation, which is the server's dependent asset. If several workstations are dependent on the server, they must be linked to the server individually, thus forming individual parent asset – dependent asset pairs.


Related assets

An asset can have up to 10 sub assets (related child and sibling assets). You can view the related assets of a base asset by clicking the **Show related assets** button.

 The **Show related assets** feature only works if pagination is enabled. For more information, see [Showing related assets](#).

Maintenance activities

Maintenance activities for assets (resulting from activity definitions) are shown in Assets > **Activity details** > **Maintenance activities**. These maintenance activities are created automatically by Planon ProCenter as soon as you add a *schedule* to an activity definition in the **Maintenance Planner** TSI. When a maintenance activity is completed, the condition of the linked asset is updated.

 For details on maintenance activities and on generating orders for the activities of an activity definition, see [Planned Maintenance](#).

Replacements

You can register replacement data for an asset, including its replacement costs. This data also enables you to create a report with an (annual) overview of expected replacement costs. You can link multiple replacements to an asset, so you could for example specify that for a group of 100 items, 10 items must be replaced every year, over a 10 year period.

Related assets

If two assets or configuration items (CIs) have the same *relation type*, the two assets / CIs are known as related assets.

Examples of asset / CI relation types:

- Network connections: the connection between wall sockets, server racks etc. and their network cables.
- Redundancy: an ISDN backup line for the main WAN link, or a server that forms a cluster together with another server.
- Continuity: link a CI which is located at another site and which is to be used as replacement in case the service that the first hardware CI supports needs to be recovered at its continuity site.
- Dependency between software CIs.
- License: a software license certificate, linking all software CIs that are covered by the same license.

Standard assets

A standard asset is a 'template' asset that you can use to speed up the process of adding a new asset. If you add an asset based on a standard asset, many asset fields are automatically populated.

You can use standard assets in TSIs such as Assets , Maintenance Planner and Condition surveys.




Planon administrators can add, copy, delete, modify or archive standard (sub) assets in Supporting data > Asset library.

Standard building elements

A standard building element is a 'template' building element that you can use to speed up the process of adding a new building element. If you add a building element based on a standard building element, many fields are automatically populated.

You can use standard building elements in TSIs such as Assets , Maintenance planner and Condition surveys.

 Planon administrators can add, add subs, copy, delete, modify or archive standard building elements in Supporting data > Asset library.

Standard service plans

A standard service plan helps you to efficiently plan preventive maintenance that applies to larger numbers of assets.

Standard service plans are used in the **Maintenance planner** TSI to compile a maintenance plan.

 For more information on adding and maintaining standard service plans or compiling maintenance plans, see [Planned Maintenance](#).

A standard service plan (together with its standard activity definitions) can be linked to an asset at the Assets > Link standard service plan action panel.


You can view linked standard service plans at Asset details > Linked standard service plans.

If you want to have a read-only view of all available standard service plans, go to Asset details > Standard service plans.


Standard activity definitions

A 'template' including detailed data on the preventative maintenance of a particular asset. Standard activity definitions are linked to an asset via a standard service plan. Standard activity definitions are used in the **Maintenance planner** TSI to compile maintenance plans.

Standard activity definitions are added and maintained in **Supporting data > Maintenance library**.

 At Asset details > Linked standard service plans, and only if relevant, you can add some deviating data in one go for standard activity definitions that are already linked to an asset (through their linked standard service plan). When compiling a maintenance plan in **Maintenance planner**, this deviating field data is used instead of the data available in the standard activity definitions of the standard service plan.

You can have a read-only view of all available standard activity definitions at **Assets > Activities/registrations**.

 For more information on entering data for a standard maintenance activity, see [Activity definition fields](#).

Technical classification

A hierarchical grouping of assets according to the technology area with which they are associated. The individual items within a technical classification have their own descriptions and codes. Technical classifications are added and maintained in Assets > Filters > Technical classifications.

Working with Assets and Building Elements

This section gives information on which asset data can be registered and which actions are available for asset groups, assets and building elements.

Classification into asset groups

You can maintain **Asset groups** at Assets > **Filters** > **Asset groups**. This selection step only includes those *Item groups* which are also marked as asset groups. In other words: item groups for which the **Asset group** option has been enabled.



For more information on maintaining asset groups and other item groups such as **Product groups** and **Purchase groups**, see [Supporting Data](#).

New assets/building elements can be added to an asset group by selecting a relevant group and going to the **Assets** selection level, where you can add new assets / building elements. For field descriptions, see [Asset group data fields](#).

Adding assets

With the appropriate authorization, you can add, modify or delete assets.

Procedure

1. At Assets, click Add on the Assets action panel.
2. Complete the relevant fields on the data panel.

For more information on the available fields, see [Asset data fields](#).

3. Click Save.



Assets can also be copied. The copying action for assets is rather complex. For more information, see [Deep copying assets](#).

Adding an asset based on a standard asset

Assets based on standard assets are added from the **Assets** selection level.

Procedure

1. On the action panel, click Add standard asset.

2. In the Add standard dialog box, select a **Standard asset** and a **Property** in the relevant fields.
3. If applicable, select a maintenance start date for the new asset in the **Maintenance start date** field.
4. Select the extra option(s) that you want to add to the new asset:
 - Include subasset(s)
 - Include standard service plans
 - Include standard asset components
 - Include defects lists - standard assets
5. Click OK.
6. Complete the relevant fields on the data panel.

For more information on the available fields, see [Asset data fields](#).

7. Click Save.



Planon ProCenter administrators can add and maintain data on standard assets in Assets > **Asset library**.

Adding standard subassets

If you add an asset that is based on a standard asset from the **Asset library**, you can optionally include subassets and other linked items. If you initially decided not to include subassets, but change your mind later on, you can use the **Add standard subasset** action.


Procedure

1. In the Assets elements list, select the asset (based on a standard asset from the Asset library), to which you want to add one or more *standard subassets*.
2. On the action panel, click Add standard subasset.
A dialog box is displayed, listing the available standard subassets.
3. Select the standard subasset you want to add to the selected asset.
4. If you also want to include any subs of the subasset (third hierarchical level and lower), make sure you check the Include subassets option.
5. Select any other options you want to include: service plans, asset components, defects lists.
6. Click OK.
7. On the action panel, click Save.

The selected subasset (with optional subs) is added to the main asset.

Adding building elements

Building elements are added in Assets , from the **Assets** selection level.

 Like regular assets, building elements have locations. When you add a building element, a location is also automatically created in the Planon ProCenter database. However, this location cannot be viewed anywhere in the user interface. When compiling maintenance plans, for example, the data on the location of a building element is used.

Procedure

1. Go to Assets and click Add building element on the action panel.
2. Complete the relevant fields in the data section.

For more information on the available fields, see [Asset data fields](#).

3. Click Save.

 If required, you can add sub-building elements to the building element

Adding a building element based on a standard building element

You can add building elements that are based on standard building elements in Assets , at the **Assets** selection level.

Procedure

1. On the action panel, click Add Standard building element.
2. In the Add standard dialog box, select a **Standard building element** and a **Property** in the relevant fields.
3. If applicable, select a maintenance start date for the new building element in the **Maintenance start date** field.
4. Select the extra option(s) that you want to add to the new building element:
 - Include subassets
 - Include standard service plans
 - Include defects lists - standard assets
5. Click OK.
6. Complete the relevant fields on the data panel.

For more information on the available fields, see [Asset data fields](#).

7. Click Save.



Planon ProCenter administrators can add and maintain standard building elements in Assets > **Asset library**.

Adding standard sub-building elements

If you add a building element that is based on a standard building element from the **Asset library**, you can also include any sub-building elements and other linked items. However, if you initially decided not to include any sub-building elements, but change your mind later on, use the **Add standard sub-building element** action.

Procedure

1. In the Assets elements list, select the building element to which you want to add one or more *standard sub-building elements*.



As mentioned above, this building element must itself be based on a *standard building element* from the **Asset library**.

2. On the action panel, click Add standard sub-building element.

A dialog box is displayed, listing the available standard sub-building elements.

3. Select the standard sub-building element you want to add to the selected building element.
4. If you also want to include any subs of the sub-building element (third hierarchical level and lower), make sure you check the Include sub-building elements option.
5. Select any other options you want to include: service plans, defects lists.
6. Click OK.
7. On the action panel, click Save.

The selected sub-building element (with optional subs) is added to the main building element.

Filtering on assets or building elements

If you want to filter the elements list either by assets or by building elements, do the following:

Procedure

1. Go to Assets.
2. In the filter bar, select Add filter.

3. In the Select filter criteria dialog box, enter a filter name in the Filter name field.
4. In the User-defined type field, enter = and select the relevant user-defined type.
5. Click Save.

If you apply this filter, the elements list only displays the selected type.

Showing related assets

If you want to see the assets in their 'family context' (parent / child / sibling asset), click the **Show related assets** button to see the related main assets and sub assets.

It is possible to see the related assets of one or more assets at the same time in the base asset list.

The application remembers your selected option whether to show related assets or not. It retains this setting even when you switch to other options or log out and log back in.

Procedure

1. Go to Assets.
2. Select one or more assets for which you want to view the related assets.
3. In the search bar, enter the search criteria.

For example, description, code, status.

4.  Click the Show related assets button.

The related main assets and the sub assets are displayed.

5. Click and open the main asset to view the sub assets.

Deep copying assets


The process of copying an asset together with its associated items is known as *deep copying*.

When deep copying, associated items can optionally be included or excluded, such as:

- subassets
- defects lists
- asset components
- counters
- gauges

- standard service plans (+ divergent data)
- asset service plans (+ expected costs)
- maintenance checklist items
- hazards

You can also specify how many deep copies you want to make. This is especially useful if you are required to enter the same data multiple times.

 You can deep copy assets with a **Disposed** status. However, archived assets cannot be deep copied.


With the required authorization, you can deep copy assets, using the following procedure:

Procedure

1. From the Assets selection level, select the asset you want to deep copy.
2. On the action panel, click Deep copy asset.

The Copying dialog box appears.

3. In the Property field, select a property to which the asset should be copied.
4. In the Number of copies field, type the required number of deep copies.
5. Specify which items associated with the selected asset you want to copy by selecting the relevant check boxes in the dialog box.
6. Click OK.

 • A deep copy does not include existing asset locations or counter registrations. However, a new asset location is automatically created for each copied asset, which only specifies the property you selected. Any other relevant asset location data must be entered manually.


• When you deep copy an asset, the linked regulations are also copied. When a regulation is linked to a standard asset and then you create a asset based on the standard asset, then also the linked regulations are copied.

Deep copying building elements

The process of copying an element together with its associated items is known as *deep copying*. When deep copying a building element, associated items can optionally be included or excluded, such as:

- sub-building elements
- standard service plans (+ any divergent data)
- defects lists
- hazards

You can also specify the number of deep copies you want to make. This is especially useful if you are required to enter the same data multiple times.

 You can deep copy building elements with a **Disposed** status. However, archived building elements cannot be deep copied.

With the required authorization, you can deep copy building elements, using the following procedure:


Procedure

1. At the Assets selection level, select the building element you want to deep copy.
2. On the action panel, click Deep copy building element.

The Copying dialog box appears.

3. In the Property field, select a property to which the building element should be copied.
4. In the Number of copies field, type the required number of deep copies.
5. Select the check boxes of the associated items that you want to copy along with the selected building element.
6. Click OK.

The specified number of deep copies is made, including the selected items in each copy.

 For more information on standard service plans (and linked deviations), defects lists or hazards, see [Planned Maintenance](#) , [Assets](#) and [Hazard registry](#).

Assigning locations to assets


You can assign locations to assets, or in other words, register the property and space where the various assets are located. If the asset is a *multiple* asset, it is possible to assign multiple locations.

Procedure

1. Go to the Assets selection level.
2. Select a relevant asset.
3. Go to Asset details > Asset locations.
4. Complete the relevant fields in the data section.

For a description of these fields, see [Asset location fields](#).


5. Click Save.

 For general information on adding, modifying or deleting Planon ProCenter elements such as locations, see [Fundamentals](#).

Generating QR codes for assets

In Planon ProCenter , it is possible to generate **QR codes** for one or more assets, which can be scanned by Planon mobile apps. You can scan QR codes with your mobile app to:

- Report an incident for an asset
- Check any open incidents on that asset

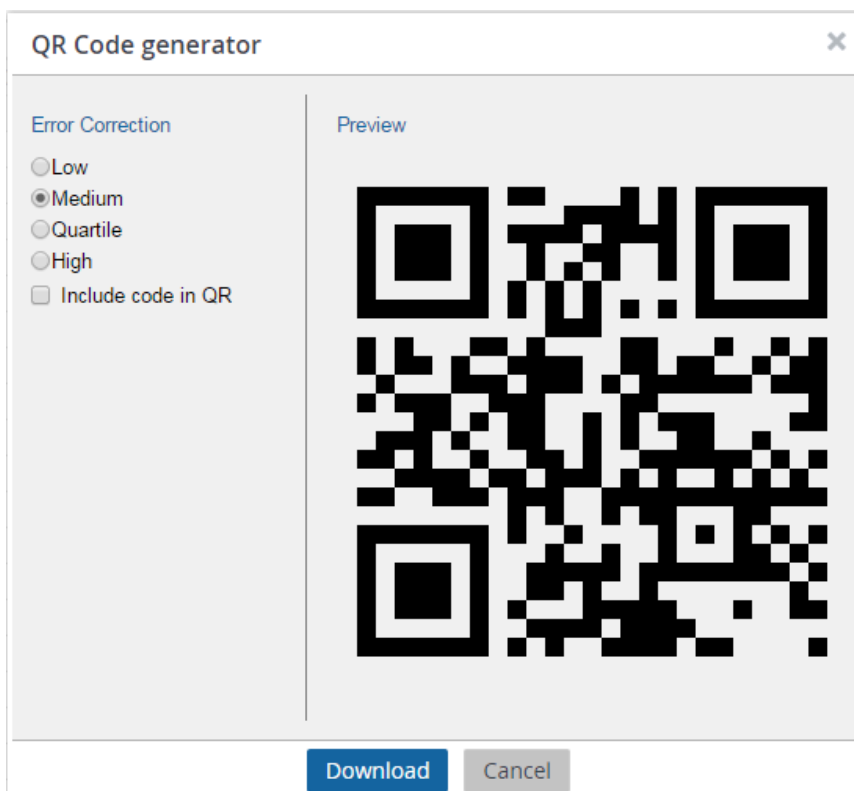
 The **Generate QR code** option is located on the **Assets** action panel and will be available only when an asset is selected.


Procedure

1. Go to the Assets selection level.
2. From the list of assets, select one or more assets for which you want to generate a QR code.

If you select multiple items, you will generate an equal number of QR codes.

3. Click on the Generate QR code button. The following screen appears:



 The image size is set to Extra-Large by default.

4. Set the Error correction level to Low, Medium, Quartile or High. The error correction level of the QR code depends on what level you select.

i It is recommended to select **Medium**. Codes generated in the medium level can be scanned faster by the apps and are good for office environments. If there is a need to create QR codes for industrial places, select the **High** error correction level. Codes with a **High** correction level can be scanned even if they are partly covered. The scanning however, will be slower.

5. Select the Include code in QR option if you want to include the code in the image. Select this option only if it is necessary, as the code will be included anyway in the image's file name.

i It is recommended to uncheck the **Include code in QR** option, as the dimensions of the image will be disturbed when the code number is included.

6. Click on the Download option to generate the QR code.

A folder named *QR-codes-ASSET.zip* contains *QR-codes.csv* file and QR codes will be downloaded in the downloads folder of your computer. Extract the files from the *.zip* file to view the generated *QR-codes.csv* and QR codes.

! The generated codes are stored in *.png* extension format and are transparent. It is not possible to choose another file extension.

The generated QR code looks as follows:



7. Open the *QR-codes.csv* file to see data of the QR code.

Adding components to assets or building elements

With the right authorization, you can add, modify, copy or delete asset components. Asset components are the individual parts of which an asset may consist.

Procedure

1. In Assets , go to Asset details > Components.
2. Complete the relevant fields in the data section.

For a description of these fields, see [Component fields](#).

3. Click Save.

Adding / viewing communication logs

In Planon ProCenter you can add or view all relevant communications regarding the selected asset or building element, in the form of communication logs. You can do this at Asset details > Communication logs.



For more information on communication logs or for field descriptions, see [Fundamentals](#).

Specifying dependency between assets

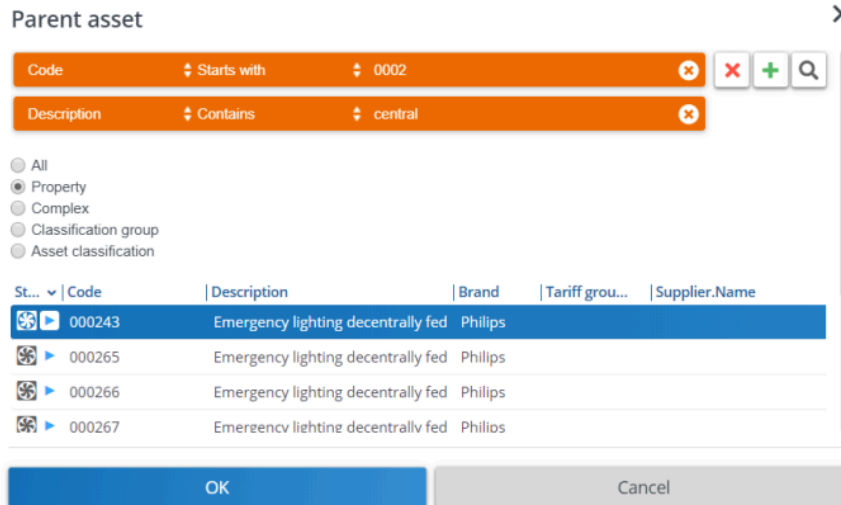
You can link two assets and specify which one of them is dependent on the other.

Procedure

1. Go to Asset details.
2. On either the Parent assets or Dependent assets selection step, click Add.
3. In the Parent asset and Dependent asset fields, click the Select a value button and select the relevant assets.

The dialog boxes have extensive filtering options that allow you to search for assets by specifying conditions on various search fields.

For example, you can specify to only show assets with a Description that Contains the term 'central'. You can also add or remove search fields by clicking the Add search field and Remove search field buttons within the dialog box.



You can use the options **Property**, **Complex**, **Classification group** and **Asset classification** to further filter the list of assets displayed by filtering them according to elements to which the asset selected in your drill-down path is already assigned to.

For example, to only see assets that belong to the same property as the currently selected asset, select **Property**. To only see assets that belong to the same building complex as the currently selected asset, select **Complex**. Selecting **All** means no filtering.

4. Click Save to link the two assets according to the defined dependency.

Depending on the currently selected step (Parent assets or Dependent assets) the parent asset or the dependent asset then appears in the elements list.

If you already selected an asset before drilling down to the **Parent assets** selection step, clicking **Add** causes the selected asset to automatically appear in the **Dependent asset** field.

Similarly, if you already selected an asset before going to the **Dependent assets** selection step, clicking **Add** causes the selected asset to automatically appear in the **Parent asset** field.

Adding asset relationships

You can create relationships between any two assets (configuration items) to make it easier to see the impact of an action or decision.

Procedure

1. Go to Assets > Asset details > Related assets.
2. On the action panel, click Add.
3. In the data section, enter the required data.
For a description of these fields, see [Related assets - fields](#).
4. Click Save.

Linking assets to a knowledge base item in Assets

In Assets , a knowledge base item that is already linked to an asset can be linked to more assets.

Procedure

1. Go to Asset details > Knowledge base items and select the knowledge base item you want to link to other assets.
2. On the action panel, click Link assets.

The Link assets dialog box appears. Use the search filter to find the assets you want to link.

3. Select the relevant assets in the Available section and transfer them to the In Use section.
4. Click OK.

The selected asset(s) is / are linked to the selected knowledge base item.



For a description of the fields of knowledge base items, see [Knowledge Base Items - Fields](#).

Registering purchase data for assets

With the appropriate authorization, you can add, modify, copy or delete asset purchase data.

Procedure

1. Go to Asset details > Purchases and register purchase data for a selected asset.
2. Fill in the relevant data.

For a description of the fields, see [Purchase fields](#).

Replacing assets

You can indicate whether an asset needs to be replaced and what the total replacement costs are.

Procedure

- Go to Asset details > Replacements, fill in the information for replacing an asset. For a description of these fields, see [Replacement data fields](#).

This data can be used to create annual overviews of expected asset costs. As multiple replacements can be linked to an asset, you can for example indicate that for a group of 100 assets, 10 items need to be replaced annually.

Changing an asset's or a building element's status

Various statuses can be assigned to assets and building elements. The available status transitions depend on the current asset status. Every newly added asset is automatically assigned the **Acquired** status. Only assets / building elements with the **Disposed of** status can be transferred to the archive. To change an asset's or building element's status, proceed as follows:

Procedure

1. Go to Assets selection level, click the asset(s)/ building element(s) whose status you want to change.



To change the status of several assets/building elements simultaneously, use **Action on selection**. For details on using **Action on selection**, see [Fundamentals](#).

2. On the Status transitions action panel, click the required status.

The status is changed.

Changing the status to **Disposed of** has consequences for any associated maintenance activity definitions. They are either:

- Deleted, if no maintenance orders have been generated yet.
- Updated, if maintenance orders have already been generated. The maintenance activity definition's end date-time will be brought forward to the end date-time of the last generated order.



For more details, see [Planned Maintenance](#).

Logging asset history

In Planon, it is possible to keep track of modifications to specific fields. At Asset details > History, you can view an asset's / building element's logged history, that is, the modifications which have been made to certain fields and which have been logged by the system.

In Field definer , the functional application manager or a user with similar authorization can enable an automatic **History** option for individual asset fields. It is possible to indicate per field whether a history should be registered. This means that any modifications in the field concerned will be saved automatically in a log file. The results of any field changes will show on the **History** selection step.

With the appropriate authorization and configuration, users can also manually add a history of changes to a selected asset / building element, via the action panel. Any comments you want to make on changed data can be entered in the **Comment** field and subsequently saved.



For more information on changing field attributes like the **History** option, see [History](#).

Reporting in Assets

Planon ProCenter includes a tool that is used to create, edit and print reports: **Reports**. With the appropriate authorization, you can access **Reports** from within all action panels in **Assets**. If you click **Report** on the action panel, the **Reporting** dialog box appears. This dialog box always includes a **User reports** tab. On the **Assets** selection level, it also includes a **System reports** tab.

The **User reports** tab provides access to functionality to create your own report definitions.



For details on creating user report definitions, see [User Report Definitions](#).

The **System reports** tab in the **Reporting** dialog box provides access to system reports that are pre-programmed for **Assets**. Here, you can also make settings regarding the presentation and output of the system report. Report settings for the configuration of these system reports can be made by administrators in *Field definer*, where **Report settings** business objects are available per system report.

The following system reports are available on the **Assets** selection level:

- **Asset condition:** this report enables you to compare the asset's actual condition (after a survey) with the asset's required condition. When running this report, make sure that the following fields are populated correctly: **Asset classification** (used for grouping), **Required condition score**. Also enter the condition data (on the **Asset details** selection level) and the condition details (on the **Activities / registrations** selection level). Always enter the applicable units of measurement.
- **Asset location differences:** this report is available for the **Base Asset** business object. It is a *verification* report. If this report contains data (assets), this means that the location details on the **Asset locations** selection level differ from the location details entered on the maintenance activity definition. You may have linked the wrong property or space to the maintenance activity definition.
- **Assets without activities:** this report lists per property which assets have no linked service plans and maintenance activities.
- **Asset passport:** this overview displays key data per selected asset, including an asset picture.

Using system reports

There are several predefined system reports available in Asset Management on the **Assets** selection step. The following procedure is an example of how you can open and preview a system report on assets.

Procedure

1. Go to Assets and select the asset(s) that you want to include in the system report.
2. On the action panel, click Report.

The Reporting window opens.

3. Click the System reports tab.

Predefined system reports are displayed. You cannot modify a system report's design, but you can make several settings concerning the presentation and output of a system report.



The **User reports** tab gives access to functionality with which you can create your own report definitions. For more information on creating user report definitions, see [User Report Definitions](#).

4. Select the relevant system report.
5. Select relevant output options for your system report:
 - **Print preview Preview & print:** enables you to preview preview and print a version of your report.
 - **Export report:** enables you to select an export format. You can choose between the PDF, HTML, CSV formats and three different XLS formats.
 - **Print:** enables you to print the system report.

Asset library

In the **Asset library**, administrators can add, copy, delete or archive *standard assets* and *standard building elements*. Basically, these are 'template' assets and 'template' building elements that you can use to speed up the process of adding new assets or building elements in the Assets TSI. If users add an asset or building element that is based on a standard asset or standard building element, many fields are automatically populated that would otherwise have to be populated manually.

More importantly, the standards from the **Asset library** are very useful in maintenance planning. Standard assets and standard building elements speed up data entry in TSIs like **Planned Maintenance** and **Survey Management**.

Adding a standard asset to the Asset Library

Proceed as follows to add a standard asset to the Asset library.

Procedure

1. On the Navigation Panel , select Supporting data > Asset library.
2. Go to Maintenance Libraries, select the maintenance library to which you want to add a standard asset.
3. If relevant, select one of the filters available at Filters.
4. Select Standard assets.
5. On the action panel, select Add - Standard assets.
6. Complete the relevant fields on the data panel.

For more information on the function of the available fields, see [Asset data fields](#), [Asset Maintenance](#) and [Fields specific to condition-based maintenance](#).

7. Click Save to save your standard asset data.

If relevant, you can add:

- standard sub-assets through the **Add sub (standard asset)** action on the action panel.
- components to the standard asset at **Standard asset details > Components**.

Adding a standard building element to the Asset Library

Proceed as follows to add a standard building element to the Asset library.

Procedure

1. On the Navigation Panel , select Supporting data > Asset library.
2. Go to Maintenance libraries, select the maintenance library to which you want to add a standard building element.
3. If relevant, select one of the filters at Filters.
4. Select Standard assets.
5. On the action panel, select Add - Standard building elements.
6. Complete the relevant fields on the data panel.

For more information on the function of the available fields, see [Asset data fields](#), [Asset Maintenance](#) and [Fields specific to condition-based maintenance](#).

7. Click Save to save your standard building element data.

If relevant, you can add:

- standard sub-building elements through the **Add sub (standard building element)** action on the action panel.
- components to the standard building element at **Standard asset details > Components**.

Linking standard service plans to a standard asset or a standard building element

Proceed as follows to link standard service plans to a standard asset or standard building element in the **Asset library**.

Procedure

1. Start Assets > Asset Library and go to Standard assets, where you can link one or more standard service plans to a standard asset or standard building element.
2. On the Links action panel, click Link standard service plans.

The **Link standard service plans** dialog box appears.

In **Available**, select the standard service plans you want to link to the selected asset / building element.



If a large number of standard service plans is shown in **Available**, you apply a search filter to only display those service plans belonging to a specified technical classification, classification group or asset classification.

3. Move the relevant standard service plans to In use.
4. Click OK.

The standard service plans are linked to the selected standard asset or standard building element.

Viewing linked standard service plans and linked standard activity definitions

In the **Asset library**, you can view the standard service plans and standard activity definitions that are linked to standard assets or standard building elements. Proceed as follows to view a standard service plan for a selected standard asset / building element:

Procedure

1. At Standard assets, select the standard asset(s) or standard building element(s) whose standard service plans you want to view.
2. Select Standard asset details.

At the **Standard service plans** selection step you can view the standard service plans that were linked to the selected standard asset/standard building element at **Standard assets**.

At the **Standard activity definitions** selection step you can view the standard activity definitions that are linked to the selected standard asset/standard building element.

Linking defects lists to a standard asset or standard building element

In the **Condition Surveys** TSI, you can enter data gathered during building surveys. This data contains information about the condition of the inspected assets/building elements. If any asset defects are observed during a survey, the surveyor can select a relevant defect from a catalog, containing defects lists. By linking a standard asset/building element to a particular defects list, a relevant list of defects is presented to the surveyor during the survey. Proceed as follows to link defects lists to a standard asset or standard building element.

Procedure

1. Start Assets > Asset Library and go to Standard > assets, where you can link one or more defects lists to a standard asset or standard building element.
2. On the Links action panel, click Link defects lists.
The **Link defects lists** dialog box appears.
3. In Available, select the defects lists you want to link to the selected building element.

4. Move the relevant defects to In use.
5. Click OK.

The defects are linked to the selected standard asset or standard building element.



In the **Asset library**, you can search for standard assets and standard building elements using **CTRL+<space>**.

Asset Maintenance

Preparing assets for maintenance and condition surveys

You can prepare assets / building elements for maintenance by:

- Linking a standard service plan from the **Maintenance Manager > Maintenance Library** to a selected asset/building element at **Assets**.
- Linking a defects list from the Supporting data > Defects catalogs to a selected asset/building element at **Assets**.

Or by

- Adding a specific asset service plan and asset activity definition(s) to a selected asset / building element, at **Asset details > Asset service plans** and **Activities/registrations > Asset activity definitions** respectively.

For more information on preparing and executing condition-based maintenance in Assets , see [Condition-based maintenance of assets and building elements](#).



The actual maintenance planning takes place in **Maintenance Manager > Maintenance Planner**, where maintenance plans are created. The work (maintenance orders) ensuing from maintenance plans is monitored and completed in Work Orders .

Linking defects lists to an asset or building element

Procedure

1. Go to **Assets** selection level and select the asset / building element to which you want to link defects lists.
2. On the **Links** action panel, click **Link defects lists**.
The **Link defects lists** dialog box appears. In **Available**, select the defects list(s) you want to link to the selected asset / building element.
3. Click the right arrow button to transfer the defects lists you selected to **In use**.
4. Click **OK**.

Adding deviating data to the standard service plan of an asset

A standard service plan can be linked to various assets. By default, all data in the standard service plan and its standard activity definitions applies to each linked asset. However, for individual assets you can add deviating field data to linked standard activity definitions (through its standard service plan). The fields concerned are:

- Budget definition
- Order group
- Percentage to be completed
- Standard order

Example:

Service plan **X** had one linked standard activity definition: **Y**. In standard activity definition **Y**, you have selected *1, Housing* in the **Order group** field. Therefore, order group *1, Housing* applies to all assets linked to service plan **X**. Let us assume that you want to make an exception for one particular asset, to which order group *3, Facilities* must apply.

You can add the deviating field data to this asset in **Assets**, by selecting the asset concerned, descending to its linked standard service plan at **Asset details > Deviations from standard service plans** and then adding the deviating data in the relevant fields. When compiling a maintenance plan this data will overwrite the data of the standard activity definitions in this asset's standard service plan.

Adding asset service plans

If you do not use standard service plans from **Maintenance Manager > Maintenance Library** for asset maintenance, or if you need a specific service plan for a particular asset, you can add asset service plans in **Assets**.

Procedure

1. Go to **Assets**, and select the asset for which you want to add an asset service plan.
2. Go to **Asset details > Service plans**.
3. On the action panel, click **Add**.
4. In the data section, complete the **Code** and **Description** fields.
5. Click **Save**.

Once you have completed adding the asset service plan, you can start adding asset activity definitions to this asset service plan at **Activities/registrations > Asset activity definitions**.



You can also archive / de-archive a service plan. For more information, see [Archiving / de-archiving service plans](#).

Adding asset activity definitions

If you do not use standard activity definitions from the **Maintenance Library** for asset maintenance, or if you need a specific activity definition for a particular asset, you can add asset activity definitions in Assets > Activities/registrations > Asset activity definitions.



For the procedure of adding asset activity definitions, see [Working with Maintenance Planner](#)

After having set a schedule for the selected asset activity definition, you can add additional data to the asset activity definition:

- *Expected costs*, at Activity details > Expected costs. For more information on expected costs, such as material costs and product requisitions, refer to the *Planned Maintenance* user guide.
- *Checklist items* at Activity details > Asset maintenance checklist items. The items will be taken into account during the generation of the maintenance orders. After an order has been generated, the checklist items will be added to the ensuing maintenance activities. In **Asset Management**, to view maintenance activities that are scheduled for an asset, asset service plan or asset activity definitions, descend directly from the selected element to Activity details > Maintenance activities.



In **Planned Maintenance**, once a maintenance plan is compiled for a property's assets, the corresponding asset service plans and asset activity definitions will be included in this maintenance plan. Subsequently, maintenance activities and maintenance orders can be generated.

Deep copying an asset service plan

You can make a comprehensive duplicate of an asset service plan, including any linked asset activity definitions, expected costs, schedules.

Procedure

1. Go to Asset details > Asset service plans and select the asset service plan you want to deep copy.
2. On the Asset service plans action panel, click Deep copy.
3. In the Copying dialog box, select the relevant expected costs you want to copy.
4. Click OK. If required, modify the deep copy's data, such as its Description.

The following elements are included in the deep copy:

- Linked asset activity definitions
- Selected expected costs
- Linked schedule

Deep copying asset activity definitions

If you want to make a comprehensive duplicate of an asset activity definition in an asset service plan, use the following procedure:

Procedure

1. Go to **Activities/registrations > Asset activity definitions**.
2. Select the asset activity definition you want to deep copy.
3. On the action panel, click **Deep copy**.
4. In the **Copying** dialog box, select the relevant options to copy along one or more types of expected costs.
5. Click **OK**.
6. If relevant, make adjustments to the data of the deep copy, for example the **Description**.

If available, the following elements are included in the deep copy:

- The selected expected costs
- Linked schedule



If you only want to make a simple copy of the asset activity definition – that is excluding the linked schedule or expected costs - select the **Copy** option on the action panel instead of the **Deep copy** option.

Linking standard / contract service plans to an asset or building element

Procedure

1. At the **Assets** selection level, select the asset / building element to which you want to link standard / contract service plans.
2. In the **Links** action panel, click **Link standard service plans / Link contract service plans**.

The **Link standard service plans / Link contract service plans** dialog box appears.

In **Available**, select the standard / contract service plan(s) you want to link to the selected asset/building element.



If a large number of service plans is shown in **Available**, you can locate the relevant service plans more efficiently by filtering on a specific technical classification, classification group or asset classification.

3. Click the right arrow button to transfer the selected service plans to **In use**.
4. Click **OK**.
The standard / contract service plans are now linked to the selected asset / building element.

Creating an asset service plan based on a standard service plan

You can create an asset service plan that is based on a standard service plan.

Procedure

1. Go to Assets selection level and select the asset to which you want to apply a standard service plan.
2. Go to Asset details > Asset service plans.
3. On the action panel, click Apply standard service plan.
4. In the dialog box, select a standard maintenance service plan that you want to apply to the asset from the list.
5. In the Asset field, select an asset to which you want to apply a standard service plan.
6. Select the corresponding check box, if you want the following to be included in the maintenance service plan:
 - Copy additional costs
 - Copy labor hour costs
 - Copy material costs
 - Copy check list items
7. Click OK.

An asset service plan, based on a standard service plan, is created.

Condition-based maintenance of assets and building elements

The technical quality of assets and building elements varies over time. In Planon ProCenter this technical quality is referred to as the asset's or building element's condition.

In the course of time, an asset's or building element's condition can deteriorate, improve or remain stable. To indicate how much the condition has deteriorated before maintenance or improved after maintenance, condition scores and other data are added/updated on an asset/building element. This is done either manually or automatically, depending on the method used.

There are two methods to update/add condition data for an asset or building element:

- Manually – in Assets
- Automated – by processing data from Survey Management > Condition Surveys.

When the maintenance activities are completed, the condition of the asset is updated based on the actual completion date of the maintenance. The planned execution of the next maintenance on that asset will be based on actual facts instead of assumptions.

New maintenance plans are made based on the latest condition score of the asset. If no recent score is available, the original surveyed score is used to calculate the execution date of the next maintenance.

- A **building element** can have various locations and may include multiple **Asset condition details**. It may be that only one 'condition detail' changes due to maintenance. In such cases, the **Aggregated condition score** of this asset's condition is based on the **Condition score** (of the condition detail) and the calculated conditions of the other details. The conditions of the other details are calculated using the *time passed since the initial survey* and the *deterioration period* and *deterioration curve* of the building element.
- **Multiple assets** also have various locations. Provided that these locations are in the same property, you can use the manual method of updating condition scores. The condition details are then aggregated in a similar way as with building elements. The same applies to updating condition score calculations when compiling a maintenance plan and generating orders.
- For more information about processing data in Survey Management > Condition Surveys, see [Condition Surveys](#).

Fields specific to condition-based maintenance

Some fields in Assets are specific to condition-based maintenance. See to the following tables for these specific fields:

[Condition data fields](#)

[Condition details fields](#)

- It is not possible to define multiple asset condition details on a single asset. A single asset can only have one asset condition detail and a quantity of 1.

Manually adding condition data

You can add data about an asset's or a building element's condition at **Asset details > Condition data**.

Procedure

1. Go to **Asset > Conditions** action panel, click **Add**.
2. In the data section, complete the relevant fields.
For more information, see [Condition data fields](#).
3. Click **Save**.
You can now proceed to add condition details to the condition data, at **Activities/registrations > Condition details**.

Manually adding condition details

You can manually add detailed information to an asset's or building element's condition data at **Activities/registrations > Condition details**.

Procedure

1. Go to **Condition data** and select the condition data to which you want to add condition details.
2. Go to **Activities/registrations > Condition details**.
3. On the action panel, **Condition details**, click **Add asset condition details – manually**.
4. In the data section, complete the relevant fields.
For more information, see [Condition details fields](#).
5. Click **Save**.

Asset condition detail update

The asset condition detail update is automatically created by Planon ProCenter when a planned maintenance order is set to **Technically completed**. The aggregated condition score of the building element is updated too to reflect the new condition.

To view the asset condition score update, go to **Activity details > Asset condition detail update**.

The following example illustrates an instance when the asset condition detail update is registered:

Example

- There is a building element, *shingled roof* of 100 m². It has a light deterioration curve profile and a deterioration period of 10 years
. 50m² is in condition 1 on 5/2/2015.
50m² is in condition 3 on 5/2/2015.

This 50m² is in condition 3 because it has a crack, but no activity was created to fix it during the survey of the building. The aggregated condition score of the building element is 2.

- You can manually add an activity to repair the crack. After the fix, the condition of that 50m² will be 1.
- A non-cyclic maintenance activity definition was added for the asset condition detail of 50m² with condition 3.
- Generate an order for this activity and complete it on 3/10/2017. An ACDU (asset condition detail update) is created when the order is set to technically complete, updating the condition of that 50m² from 3 to 1.

The condition of the other asset condition detail is calculated, based on the deterioration curve and period of the asset, and the fact that we know it was in condition 1 on 5/2/2015.

The condition of this 50m² is now 2.33. The aggregated condition score of the building element is updated to $(50*1+50*2.33)/100 = 1.67$ on the latest condition update date-time 3/10/2017.

Note that when calculating the totals on the asset's condition, we use the value in the **Deterioration period** field of the asset and when calculating the next maintenance schedule we are using the value from the **Deterioration period** field of the condition-based activity schedule. Make sure that these values are the same.

Automatically populating Assets after processing a survey

After processing survey data in Survey Management > Condition Surveys, Assets is updated with the most recent findings. The result is that:

- New assets or building elements are created, based on processed survey data. When new assets or building elements are added, new associated condition data and condition details are also added. For more information, see [Adding new assets based on processed survey data](#).
- Existing condition data and condition details are updated. For more information, refer to Updating Assets by processing a survey.

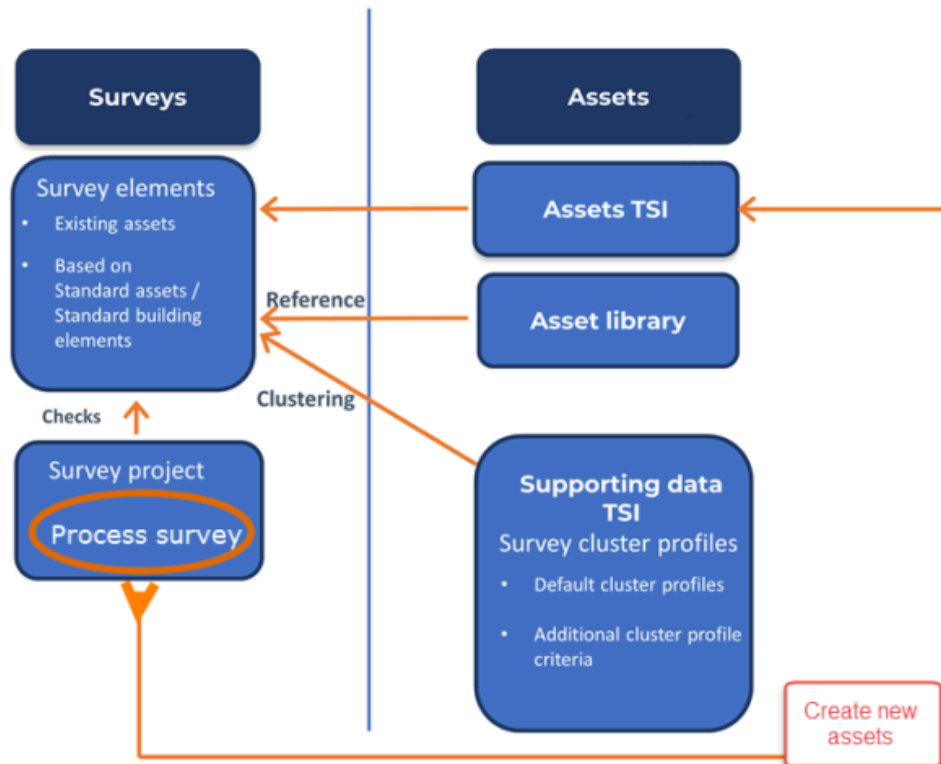
Adding new assets based on processed survey data

Survey elements in Survey Management > Condition Surveys are the basis for populating Assets with new assets or building elements.

When processing survey data in **Condition Surveys**, Planon ProCenter checks whether there are any references from survey elements to standard building elements or standard assets in the **Asset Library**. If a reference exists, Planon ProCenter takes into account the cluster profile defined in Supporting data to determine the number of assets to be created.

When new assets are created they not only inherit the property, standard asset, unit of measurement and additional cluster profile criteria, but also fields such as **Code, Description, Brand**, etc. which are derived from the standard asset or standard building element.

As a result, standard assets or standard building elements with the same default and additional cluster profile criteria form a new asset in Assets .



i For more information on defining cluster profiles, see [Survey cluster profiles](#).
For more information on adding survey elements, see [Condition Surveys](#).

Updating Assets by processing a survey

If you process survey data in Survey Management > Condition Surveys, condition-related data of existing assets or building elements is updated and new assets or building elements are added in Assets . For an overview of the relevant fields, refer to [Fields specific to condition-based maintenance](#).

To use the action **Process survey data**, a survey element must be set to the status **Ready for processing**.

i To make a status transition to **Ready for processing**, the **Observed condition before maintenance** field at **Survey elements** must be populated.

CAD Integrator in Assets

In Assets , you can start CAD Integrator by clicking the CAD Integrator button, to display a selected asset graphically in a converted AutoCAD drawing.

To start CAD Integrator in Assets while simultaneously opening a relevant CAD drawing, the following conditions have to be met:

- In Spaces & Workspaces an *.orj drawing is linked to the floor that holds the space that is also present in the location assignment of the asset (refer to **Asset details > Location assignments**);
- In Assets , only one asset with a fully specified asset location is selected in the elements list. The CAD Integrator drawing that has been linked to the floor of this asset's space is displayed as soon as you start CAD Integrator .



If multiple assets are selected, CAD Integrator starts with an empty pane. If an asset is selected whose asset location is unspecified, the **Select a floor drawing** dialog box is displayed. Select a relevant drawing from the list to start CAD Integrator .

When you select a space in CAD Integrator, the assets linked to it will be highlighted in the elements list.

After you have opened CAD Integrator for a selected asset, you can link/unlink, highlight, reposition, rotate and copy asset symbols in the drawing, and synchronize updates in the drawing with data in the Planon ProCenter database.



For more information on working with floors, spaces and assets in CAD Integrator , see [CAD Integrator](#).
For information on making system settings for CAD Integrator , see [CAD Integrator threshold values](#).

Graphical viewer in Assets

The Graphical viewer provides a graphical representation of assets/configuration items (CIs) and linked SLA services, and the relations between them.

The following relations can be shown for a selected asset / CI and linked (SLA) service:

For a selected CI:

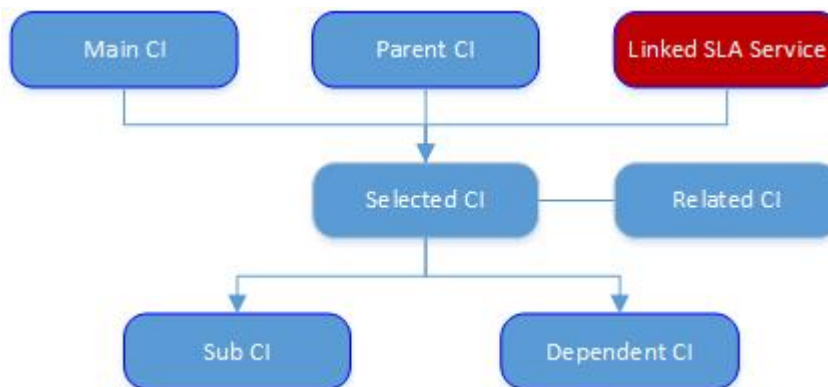
- Main CI / Sub CI
- Parent CI / Dependent CI
- Related CI
- Linked SLA service

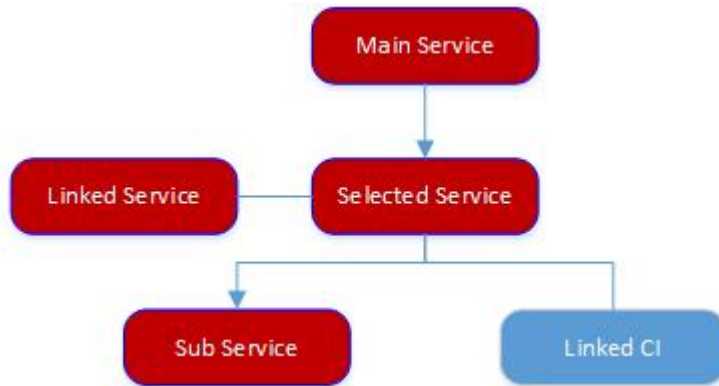
For a selected SLA service:

- Main service / Sub service
- Linked CI
- Linked service

- For **Related assets**, you must first define **Asset relation types** in Supporting data .
 - For linked services to be shown on the Graphical viewer, an asset / CI must be linked to a relevant service via the **Link services** action on the **Assets** action panel.

In the Graphical viewer, the hierarchical arrangement of the CIs (assets) and (SLA) services (depending on their mutual relations) is displayed in the images given below:





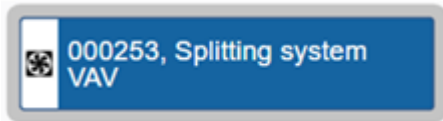
In the Graphical viewer, CIs / assets are represented by graphical units called nodes, which are connected by lines that represent their mutual relations. The **Parent – Dependent** and **Main – Sub** relations are represented by an arrow, which always points to the dependent/sub asset. All other relations are represented by a straight line.

 The Graphical viewer is not available for **Building elements**.

Understanding the Graphical viewer


Select a CI / asset in the Assets TSI on the **Assets** selection level. From the views available above the action panel, select **Graphical viewer**.

The selected CI / asset is displayed as a main *node* in the Graphical viewer.

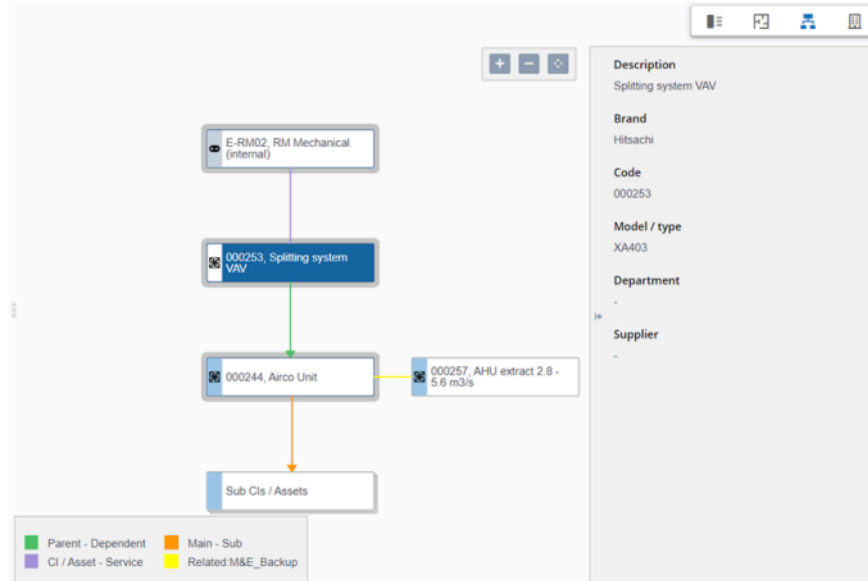


The following features are available on the **Graphical viewer**:

1. A toolbar with **Zoom out**, **Zoom in** and **Fit to screen** buttons.
You can also use the mouse wheel to zoom in and out.
2. A sliding pane (details panel) on the right, displaying the details of the selected node. The details are obtained from **Data only** user reports. The report must be selected in the Graphical CI/Asset Viewer settings > Data only report – asset details and **Data only report – SLA details** fields.

 For more information on selecting data only user reports, see [Configuring Graphical CI/Asset viewer settings](#).

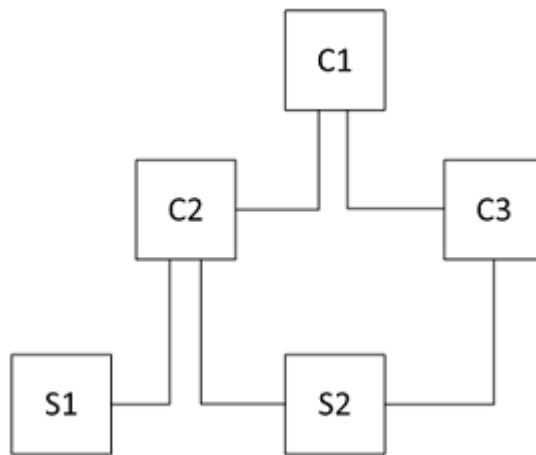
3. A legend, showing the colors that represent the different relation types between the assets and services on the Graphical viewer.
4. Double-clicking on a node displays a diagram of configuration items / assets, services and their mutual relations.



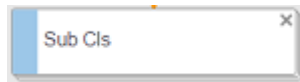
5. Selecting a CI / asset node highlights the corresponding CI / asset in the elements list, allowing you to drill down from this selected CI /asset to the **Asset details** selection level. You can also switch to the data view of the newly selected CI / asset.

Actions on the Graphical viewer

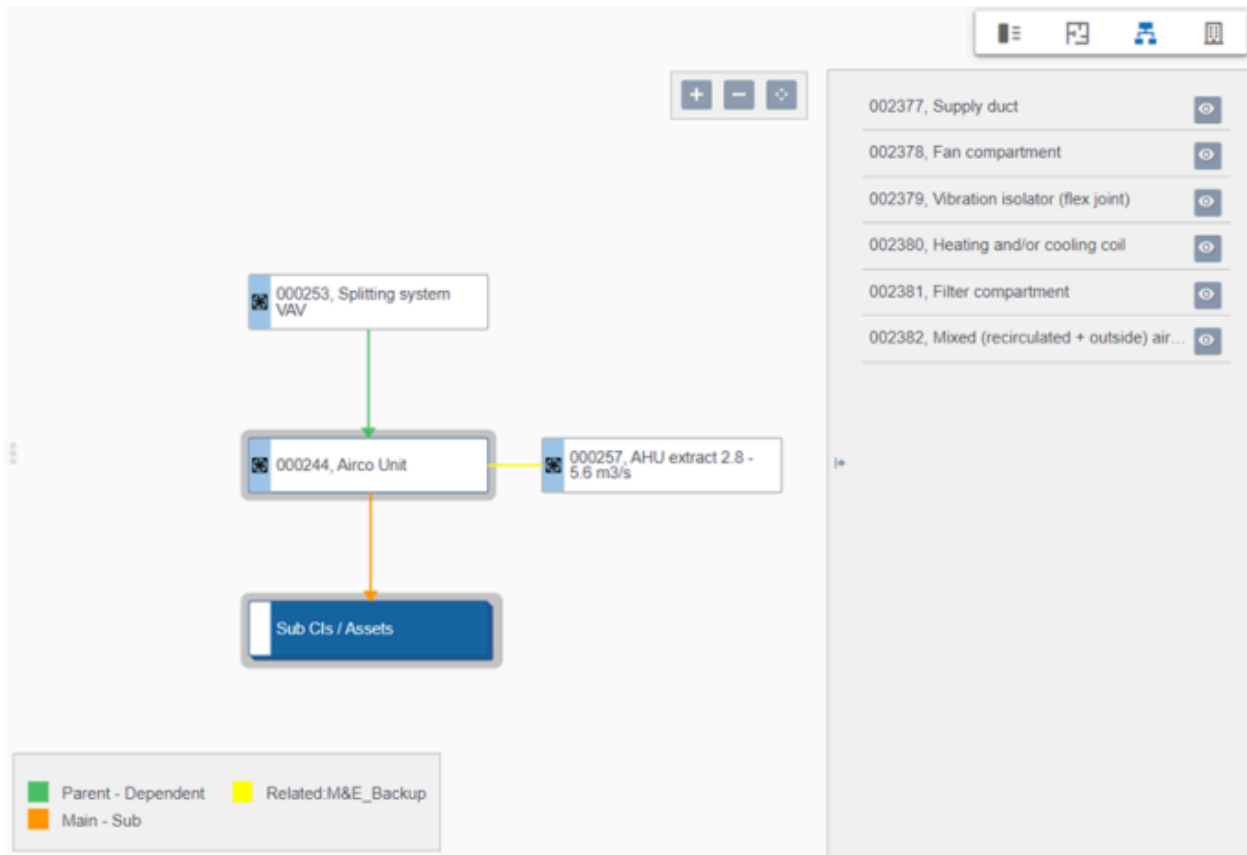
- A **single click** on a node highlights the corresponding CI / asset in the elements list, allowing you to:
 - drill down from this selected CI /asset to the **Asset details** selection level
 - switch to the newly selected asset's data view.
- A **double-click** or **Shift + click** on a node displays all the defined relations of that node.
- Click **X** to hide a node with its direct relations. When a node is hidden, all the nodes that originated from this node will also be hidden. See the following diagram:



- Click on C1 will display C2 and C3
- Clicking on C2 will display S1 and S2
- Clicking on C3 will reveal a relation to S2 (as it is already displayed)
- If you hide C2, both S1 and S2 will be hidden
- If you hide C3, only C3 will be hidden
- If you click on C3 first, only S2 will be displayed. If you subsequently click on C2, S1 is displayed and a relation is established to S2
- If you hide C2, only S1 will be hidden (since S2 originated from C3)
- If you hide C3, then S2 will be hidden
- If there are more than five nodes of the same type, they are grouped together:



- Clicking on the stacked node displays all its nodes on the sliding details pane on the right.



- Clicking on the 'eye' symbol will extract the CI from the group and displays the asset and its relation separately with the main node.

Configuring Graphical CI / Asset viewer settings

Configuring Graphical CI / Asset viewer settings includes:

- Assigning preferred colors to the relation types in the Graphical viewer.
- Creating and linking the **Data only** reports that are required to display the data on the details panel.

i In order to access the settings for Graphical CI / Asset viewer, you must add the **Graphical CI / Asset viewer settings** (SysSetCIViewer) TSI to the navigation panel.

Procedure

1. Go to the Graphical CI / Asset viewer settings TSI.
2. In the data section, select the colors for the relevant relations.
3. Select a Data only report in the fields Data only report – asset details and Data only report – SLA details. By selecting a report in these fields you can display data in the Graphical viewer.

The Data only reports for assets and SLAs must be created separately. For assets you can do this in the **Assets TSI** on the Assets level and for services in the **Services TSI** on the Services level respectively.



Sub-reports within data only user reports will not display data in the Graphical viewer.



For more information on creating **Data only** reports, see [Creating 'Data only' reports](#).

4. Click Save.

You have now defined the colors for the relation types in the Graphical viewer and also assigned **Data only** reports.



You can reset the colors selected in the fields to their default values by clicking on the **Reset CI viewer colors** option on the action panel.

BIM viewer in Assets

The BIM (Building Information Modelling) viewer provides 3D modeling representation of the assets and building elements in a building. On selecting an asset or building element, you can clearly see its position and its relation to other assets / building elements in the building.

The BIM viewer also provides interaction with Planon elements. For example, selecting an asset in the element list will highlight the linked asset in the BIM viewer and vice-versa.

Understanding BIM viewer

If a BIM model has been configured for a property, a 3D model can be displayed for assets on the **Assets** selection level (in the **BIM viewer** view). You can zoom in and out to get a proper view of a selected asset.

You can also zoom in on the complete building to find other assets and building elements. If you select an asset in the model it will be highlighted in the elements list or vice-versa.



- You can only view the BIM model in the BIM viewer if the model is linked to a property.
- If there are multiple BIM models linked to a property, you can use BIM model selector to select the model you want to display.

- For more information on configuring a BIM model, see [Configuring BIM Viewer for AppSuite](#).

Linking BIM objects to assets

You can view a BIM model in Assets . The assets in the elements list can be linked to the assets in the BIM viewer.

You can do this by using [BIM Exchange](#) or they can be linked manually. When the links are created, you can click on the BIM model to select an asset. If you click an asset in the list the linked asset is highlighted in the model.



This procedure only works if the improved feature **Discontinue support for BIM-GUID** field on the **Assets** and **Spaces** business objects has not yet been enabled.

Procedure

1. In the Assets TSI, select a property (that is linked to a BIM model).
2. Go to Assets and select BIM viewer.

The BIM model is displayed.

3. At the top left click the BIM menu.
4. Select the Link BIM objects option.
5. On the model, select an 'asset' to which you want to link an asset in the element list.

For information on working with the BIM model, see [Understanding BIM viewer](#).

The **Assets** dialog is displayed, listing all the simple assets in the selected property.

6. Select an asset to which you want to link the BIM asset and click OK.

Configuring BIM Viewer for AppSuite

Before you can configure the BIM settings for Planon AppSuite, make sure you meet the following preconditions:

- You have configured the **BIM Exchange** functionality in Planon Web Client. This means that Planon data on buildings / assets is linked a BIM 3D-model.
- You have exported the BIM GUIDs from Revit to Planon. BIM GUIDs enable end users to make selections and retrieve information in BIM Viewer.



See the **BIM - Installation and Configuration Guide**, **BIM Requirements** and **BIM Exchange** user documentation for more information.



AppSuite can only display BIM models that are configured in Planon ProCenter . AppSuite does **not** support BIM models in SVF2 format.

In most Planon AppSuite modules, where relevant, end users can use the BIM Viewer feature to view 3D-models of buildings and their assets. In Planon ProCenter, BIM Viewer is available as a special view on the **Assets** selection level.

If your Planon environments meet the above pre-conditions, you can start preparing your Revit files for conversion to a 3D-model that can be displayed in the Planon AppSuite or in Planon ProCenter > Assets . See [Converting your files into a 3D-model](#).

Converting your files into a 3D-model

Prepare your Revit source files for conversion on the [Autodesk Platform Services](#) website.

After creating an account and signing in, you can watch tutorials and buy tokens to perform the actual conversion.

Procedure

1. Create an Autodesk user account and sign in.



For more information, see Step 1 in [Creating an app](#).

2. Watch any tutorials (Autodesk) you may think relevant.
3. Buy the required amount of credits for you conversion.
4. Perform the actual conversion as specified on the site.

Your source files are converted to a folder structure containing the 3D-model. The .SVF file in that folder is crucial, as this file is used by the app to access and load the other files.

5. Copy this folder structure to the WebDAV server.

You can now add the model to the Supporting data > BIM models TSI in Planon. See [Configuring a BIM model](#).

Configuring a BIM model

Precondition: Your 3-D model is available at the right location on the WebDAV server or Autodesk Cloud. Now, you can organize and maintain the available BIM models as required in Supporting data > BIM models.

- On the **BIM model groups** level, you create a group for your property.
- On the **BIM models** level, you can add BIM models to your property and specify **BIM model type categories**.
- On the **BIM model types** level, you can add BIM model types to your BIM model.

Procedure

1. Go to Supporting data > BIM models > BIM model groups.
2. On the action panel, click Add.
3. Enter a Code and a Name for the BIM model group and link it to a **Property**. Click Save to apply your changes.
4. Go to **BIM models** and add a BIM model.

At this level, you can also specify BIM model type categories (Electrical, Mechanical, ...).


5. Go to BIM model types and add your BIM model types.
6. From the BIM model dialog, specify the:
 - a. BIM model
 - b. BIM model type category
 - c. WebDAV or Autodesk reference
 - d. Start date
7. Click Save.

The BIM model is ready for use in BIM Viewer.

Working with Asset Counters


This chapter focuses on counters. Assets such as copiers, printers, fuel tanks or company cars are often equipped with one or multiple counters. With the appropriate authorization, it is possible to link counters and registered counter values to assets in Planon ProCenter .

Counter implementations in Planon ProCenter

 It is possible to perform a once-only conversion per counter of counter type 1 to type 2.

There are two possible counter implementations in Planon ProCenter :

1. Counters that are added and maintained in the Assets TSI, at the Asset details > Counters. Compared to type 2, this type has limited functionality.
2. Counters that are exclusively added and maintained in Meters , at the **Meters** selection level. This type is offers more functionality than type 1, for example with regard to the **Maintenance Manager** TSI.

 This chapter is about using the first type of counter implementation. For more information about the second type, see [Meters](#).


Counter readings

The energy consumption or any other type of consumption by an asset can be calculated by registering and processing counter readings. If you descend from the **Asset details** selection level > **Counters** selection step to the **Activities/registrations** selection level, you can enter the counter readings of a selected asset over any period of time. Some relevant values at the **Counter** selection step will subsequently be automatically adjusted, based on the latest reading. Additionally, Planon ProCenter uses these counter readings to perform calculations that enable you to analyze the consumption by the selected asset.

Consumption


The way calculations are performed on counter readings can differ greatly, depending on the type of consumption. Consumption by assets could be anything from printer toner to fuel. As a result, calculation methods will differ. For example: a copier counter is ascending, but a fuel tank counter is descending. This will be taken into account in any calculations that are performed.

Adding counter data

 It is possible to add a counter to a multiple assets. However, this is not recommended. It can be unclear as to what part of the multiple asset the counter is actually referring to. If you try to do this, the system will warn you. You can, however, choose to ignore this warning and proceed adding the counter.

For a description of these fields, see [Counter data fields](#).

- In the **Asset details > Counters** selection step you can add, modify, copy or delete counter data of a selected asset.

 For general information on adding and deleting elements, see [Fundamentals](#).

Adding counter reading data

At the **Activities/registrations** selection level you can add, modify, or delete counter reading data.


 For general information on adding and deleting elements, see [Fundamentals](#). For a description of these fields, see [Counter reading data fields](#).

Example

You want to register the number of copies that were made over a certain period by a copier. To register the counter reading, you click the **Add** button in the **Counter readings** action menu. A new counter reading is added. You specify the date of the current reading in the **Date - time of reading** field and enter the new counter value in the **Registered value** field. Any comments on the reading can be entered in the **Comment** field. Planon ProCenter calculates the copier's consumption since the last reading and populates the **Consumption** field with a new value.



At the **Asset details > Counters** the data is now adjusted to the latest reading.

If you have assembled counter readings for a particular asset over a longer period of time, and if you have the necessary authorization for creating report definitions, you can also create a report definition to analyze the asset's consumption.

 For more information on creating report definitions in Planon ProCenter , see [User Report Definitions](#).

Assets – Field Descriptions

Asset fields

Field	Description
General	
Asset tag	<p>If applicable, enter the asset's RFID tag code. RFID tags can be read by an RFID scanner. The Asset tag field is typically used to find a match between an asset's scanned RFID code and the code entered here. Currently, only Planon-AppSuite supports RFID scanning.</p> <p> Depending on your use case, you can also use this field to register unique IDs other than RFID tags.</p>
BIM GUID	<p>The BIM GUID was used to identify assets for BIM viewer.</p> <p>Following the activation of the improved feature Discontinue support for BIM GUID field, the functionality behind this field is deprecated and is replaced by BIM system BO links.</p>
Code	<p>Asset codes are used to uniquely identify an asset. Asset codes are either generated and displayed automatically in this field or they must be entered manually.</p> <p> For more information on configuring automatic code generation, see Using macros to specify a default value (Field definer).</p> <p>Planon products such as apps (AppSuite, Planon Live app) use this code to find matches with scanned QR or bar codes.</p>
Cost center	Select a relevant cost center for the asset.
Description	Enter a relevant description for the asset.



Field	Description
Main asset	<p>If an asset is a sub asset, use this field to specify the ID code and a description of the main asset.</p> <p>This field enables you to add a sub asset to another main asset, by selecting one from the pick list.</p>
Of department	<p>Select the department that owns the asset. It is recommended to use either the Of person or the Of department field, not both, since the use of both fields increases the chance of errors.</p>
Of person	<p>If applicable, select the person who owns the asset. This list contains people from the Personnel TSI.</p>
Simple	<p>Use this Yes / No field to specify whether or not the selected asset is a simple asset, which means it consists of one single asset.</p> <p>If you select No, it means that the asset is a multiple asset.</p>



Specifications



Article number	Enter the article number of the asset.
Brand	Enter the brand of the asset.
Energy label	Select a relevant energy label from the Energy label dialog box that is available in this field. Energy labels are maintained and added in Supporting data .
Missing	Use this yes/no field to specify whether the asset is missing or not.
Regulations	You can open a linked file that was created in a program other than Planon ProCenter , containing information on the safety regulations for a specific asset, for instance.
Serial number	Enter the serial number of the asset.

Classifications

Alternative classification	Select a relevant classification method from the dialog box available in this field.
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Field	Description
Asset classification	<div data-bbox="708 247 1321 369" style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">  Authorized users can define alternative classifications in Survey Management > > Condition Surveys at the Filters selection level. </div> Enter the relevant asset classification from a dialog box containing the methods defined in Supporting data .
Classification group	Select the code and the description of the classification group to which an asset belongs. If you have selected a classification group at the Components selection level, the field is automatically populated.
Technical classification	Enter the technical classification to which an asset belongs.
Location	
Asset location details	This tab displays read-only data on the location that has been assigned to the selected asset. For more information on asset location, refer to Assigning locations to assets .
Service	
Entrusted to	Select the person who is entrusted with the care for the asset. This list contains people from the Personnel TSI.
Linked services	Displays the SLA services that are linked to the selected asset.
Priority	Simplify the prioritization of orders by registering a priority directly on the asset. The value in the asset's Priority field is taken over to the order's Priority field when the asset is selected on the order. You will still be able to edit the order's Priority field.
Supplier	<div data-bbox="708 1579 1321 1835" style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">  This field is especially convenient if you do not use SLAs / Service agreements or a priority matrix to automatically determine the order's priority. If you use this field, but also use SLAs / Service agreements / a priority matrix, their priorities will overrule the value coming from this field. </div> Select the supplier of the asset.

Field	Description
Service company	<p>This list includes addresses from the Addresses TSI.</p> <p>Select the company that services the asset. This list contains addresses from the Addresses TSI.</p>
Maintenance	
Deterioration curve	<p>Select a relevant deterioration curve linked to an asset or standard asset in Assets .</p> <p>It is used in combination with the deterioration period to calculate the condition of the asset in X days after the condition was measured in a survey.</p> <p>Authorized users can define deterioration curves in Supporting data > Deterioration profiles.</p>
Deterioration period	<div data-bbox="708 894 1325 989" style="border: 1px solid blue; padding: 5px;">  For more information, see Deterioration profiles (Supporting data). </div> <p>This field is used to calculate the asset condition based on a date and a known condition on a certain date (latest survey date, latest survey condition score or latest condition update date-time and condition after maintenance).</p> <div data-bbox="708 1209 1325 1367" style="border: 1px solid blue; padding: 5px;">  The deterioration period of the asset (building element) is automatically populated with a value from linked maintenance activities or the technical lifespan. </div>
Expected economic end date	<p>Enter the asset's expected economic end date. This is the asset's end date based on economic devaluation of the asset. For example, if a computer is devaluated after three years, it is of no economic value after three years.</p>
Expected economic life span	<p>This read-only field displays the expected economic life span in months. The value in this field is the difference in months between the Expected economic > end date and the Date of manufacture.</p>


Field	Description
Expected technical end date	Enter the asset's expected technical end date. This is the asset's end date based on its technical specification.
Expected technical life span	This read-only field displays the expected technical life span in months. The value in this field is the difference in months between the Expected technical end date and the Date of manufacture .
Functional class	Select a functional class from the dialog box available in this field. A functional class is the division of a property according to the function of its constituent parts.
Important notice	<p>Use this field to provide planners or engineers with critical asset information, for example the asset's allowed remaining downtime. The information is also shown in Planon AppSuite:</p> <ul style="list-style-type: none"> • in the My jobs module (on the Job summary > Asset block and Asset details block) • in the Assets module
Is planned maintenance required? (Y/N)	<p>Indicate whether or not you want to include this asset into maintenance plans in Maintenance Planner.</p> <div data-bbox="708 1243 1321 1331" style="border: 1px solid #00a0e3; padding: 5px;"> <p> This field must be set to Yes, to enable the asset for planned preventive maintenance.</p> </div>
Latest condition score	This read-only field displays the aggregated condition score of the existing asset or building element corresponding to the latest survey.
Latest quantity	This read-only field displays the total number of assets or building elements corresponding to the latest survey date.
	<p> In order to view maintenance activities that are planned for a selected asset: descend directly from the selected asset at the Assets selection level to Activity details > Maintenance activities.</p>


Field	Description
Latest survey date	This read-only field displays the latest survey date for the selected asset or building element.
Maintenance end date	Enter the date on which maintenance of the asset ends. This date is taken into account when compiling maintenance plans in Maintenance Planner . No maintenance activities are generated after this date.
Maintenance level	<p>Specify the relevant maintenance level for the asset (for example <i>High</i>, <i>Moderate</i> or <i>Normal</i>). Maintenance levels must be defined in Supporting data > Picklists.</p> <p>The Maintenance level field along with the Risk class field are indicators to allow you to flag those assets that would represent significant risk on failure and to also determine based on the risk class that they should have a 'high', 'moderate' or 'normal' maintenance level. Both fields are used in the Asset passport system report.</p>
Maintenance start date	<p>Enter the date on which maintenance of the asset starts. This date is taken into account when compiling maintenance plans in Maintenance Planner. No maintenance activities are generated before this date.</p> <div data-bbox="708 1188 1321 1446" style="border: 1px solid #00aaff; padding: 5px;"> <p> In contract service plans, the asset's Maintenance start date is also applied, even if this start date is earlier than the start date of the corresponding contract line. The associated activity definition is planned from this maintenance start date, according to the specified frequency.</p> </div>
Manufacturer	Enter the name of the asset's manufacturer.
Quality level	<p>If you use the Objective-based maintenance solution, you can select a relevant quality level for the maintenance of the selected asset / building element, in this field.</p> <div data-bbox="708 1701 1321 1791" style="border: 1px solid #00aaff; padding: 5px;"> <p> The complete Objective-based maintenance solution is scheduled to be released mid-2023.</p> </div>
Remaining economic life span	This read-only field displays the remaining economic life span in months. The value in this field is the difference in months

Field	Description
Remaining technical life span	between the Expected economic > end date and the current date. This read-only field displays the remaining technical life span in months. The value in this field is the difference in months between the Expected technical end date and the current date.
Replacement costs	In this currency field, enter the expenses to be made if the asset/building element must be replaced.
Replacement quantity	Enter the quantity of asset/building elements that must be replaced. The Replacement quantity field is associated with both the Replacement costs and Unit fields. For example, if the entered replacement costs are €100, the entered replacement quantity is 20 and the selected unit is m2, it costs €100 to replace 20m2 of the asset/building element.
Required condition score	Enter the condition score that the asset or building element must have, either for legal reasons or according to a certain standard.
Risk class	Select the relevant risk class from a dialog box containing risk classes that were defined in Supporting data > Risk class . This field allows you to indicate the economic risk if the asset malfunctions. The value specified indicates how urgently the asset must be put back into operation.
Survey site	Select a relevant survey site (an indication of the location where maintenance takes place) from the dialog box available in this field.
Trade	Link a trade to the asset, so that the appropriate tradesperson can attend to it. The trade selected here is also auto-populated on orders and maintenance activity definitions that are related to the asset.
Tax / VAT tariff	From the dialog box in this field, select a tax / VAT tariff that applies to the replacement costs of the asset / building element.

Field	Description
Weight	Enter the asset's weight (the unit of measurement is undetermined).
Miscellaneous	
Amperage	If applicable, enter the amperage of the selected asset in this field.
Age of asset	This read-only field displays the age of the asset. The value in this field is the difference in months between the current date and the Date of manufacture .
Asset size	Enter the asset's dimensions (the unit of measurement is undetermined).
AutoCAD symbol name	Select a symbol that is used to display the asset in AutoCAD drawings.
CAD Integrator symbol name	Select a symbol that is used to display the asset in CAD Integrator drawings.
Capacity	Enter the capacity of the selected asset.
Control certificate	Select a relevant control certificate for the asset from the dialog box that is available in this field.
Country of origin	Enter the country where the asset was manufactured.
Entry date	This field is automatically populated with the date on which the selected asset is added in Planon ProCenter .
Date first used	Enter the date on which the selected asset was first used.
Date of manufacture or construction	Enter the date on which the asset was manufactured.
Information text	Enter the information about the asset that you want to be displayed when this asset is entered on orders. For more information on using the information text field, see Displaying additional requestor/asset information on an order (Work Orders).
Insurance	Select the policy number of the insurance that applies to this asset.

Field	Description
Item display type	<p>The data you want to register can vary per asset. The selected display type determines which fields are displayed for an asset. Select a relevant display type for the asset from the dialog box that is available in this field.</p> <p>For more information, see Display types (Field definer).</p>
Ownership	<p>Indicate whether the organization is owner of the selected asset, or not.</p>
Photo	<p>Open a photo of the selected asset.</p>
Protection class	<p>In this field, enter the protection class of the selected asset.</p>
Power	<p>Enter the power of the relevant asset.</p>
Purchase item	<p>Select the related purchase item. If you modify the value in this field, other fields may also change. The fields involved are: Classification group, Brand, Supplier, Description (if empty) and Type.</p>
Quality control mark 1	<p>Use this yes/no field to specify whether or not the selected asset has been approved in accordance with quality control mark 1.</p>
Quantity	<p>Specify a quantity for the asset building element.</p> <p>For the building elements this quantity is updated whenever the quantity in the Activities/registrations > Condition data is modified due to a condition survey. When you add new places for assets, the total quantity is updated to include the sum of quantities in those locations.</p>
Record	<p>Enter information including additional information about the asset.</p>
Tariff group	<p>Select a relevant tariff group for the asset from the dialog box that is available in this field.</p>

 When you create asset condition data on a simple asset, the quantity should always be 1.

Field	Description
Unit	Enter the unit to calculate the quantity of the asset with. For example pieces, yards, dozen etc.
	<div style="border: 1px solid red; padding: 5px;">  This field is not visible by default. The Planon administrator can make it visible in TSIs . If you use asset service plans and asset activity definitions this field must be populated. </div>
Unit of weight	Select the asset's unit of weight from the dialog box that is available in this field.
Voltage	If applicable, enter the voltage of the selected asset in this field.
Weight	Enter the asset's weight.
Warranty expires on	Enter the date on which the corresponding warranty expires.

Attributes

Attribute set 1-3	If attributes sets have been configured for the asset, the Attribute set fields provide detailed, additional information. Refer to Configuring attributes for more information on using attributes sets for (standard) assets.
Attributes 1-3	Displays the actual attributes configured for the asset, with their corresponding attribute set.

Financial - revenue generation - Service Providers mode

Standard deductible applicable until	Specify at what point the 'standard deductible' fee no longer applies to the selected asset. This is checked when calculating the standard deductible amount upon the revenue generation. See Service Providers > Back-office operations > General terms - fields for more information.
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Asset group fields

The read-only data, which is derived from the Supporting data launch group, is available for asset groups. For a description of these fields, refer to the following table.

Field	Description
Classification code	This field displays the group's classification code. For example: the Furniture group with classification code 23.
Classification group	This field displays the full code of the classification group. For example: the Furniture group (classification code 23) contains the Cabinets subgroup (classification code 15), which contains the Filing cabinets group (classification code 09). In the Classification group field you will find the value 23.15.09 for the group.
Name	This field displays the group's name.
Display type	The selected display type determines which fields are displayed for a group. For more information on configuring display types, refer to the FieldDefiner part of the Planon ProCenter user documentation.
Depreciation rate	This field specifies the percentage that is annually written off for assets that belong to this group.
Catalog item group Y/N	If the value in this field is Yes, the selected group is also a catalog item group. This field is automatically populated.
Purchase item group Y/N	If the value in this field is Yes , the selected group is also a purchase item group. This field is automatically populated.
Asset group Y/N	At the Asset groups selection level, the value in this field is always Yes for each group, since the selected group must be an asset group, in order to be displayed here.

Asset and building element statuses

Status	Description
Acquired	Each newly added asset/building element is assigned this status automatically.
In use	From the moment an asset/building element is used, set its status to In use .

Status	Description
Idle	If an asset/building element is currently not in use, set its status to Idle .
Disposed of	If an asset/building element is no longer of importance in Planon ProCenter , for example because you have sold it, set its status to Disposed of .

Asset location fields


Field	Description
Date	Select a date as per which the asset location should take effect.
Property	Select the property where the asset(s) is/are located.
Space	Select the space where the asset(s) is/are located.
Quantity	In case of a multiple asset, enter the number of items that are present at the selected location.


Component fields

Field	Description
Asset	This field is automatically populated with the code and description of the selected asset.
Sequence number	Enter a sequence number for the component.
Code	Enter a code for the asset component.
Name	In this field, you can enter a name for the asset component.
Quantity	Enter the number of components you want to add.
Unit	From the dialog box in this field, select a unit that applies to the quantity, for example kg, pieces or set.
Type	Use this field to specify the type of component you are adding.

Field	Description
Document	In this field, link a digital document to the component.


Condition data fields

Field	Description
Asset/building element	Enter the relevant asset or building element whose condition data are added.
Survey date	Enter the date on which the condition of the selected asset or building element is observed. If the condition data is based on processed survey data from Survey Management > Condition Surveys this field is populated automatically.
	<div style="border: 1px solid red; padding: 5px; display: inline-block;">  After clicking Save, you cannot modify this value anymore. </div>
Aggregated risk score	<p>This calculated read-only field displays the weighted average taken from all aggregated risk scores and quantities that are available at Condition details for a selected asset or building element.</p> <p>Example</p> <p>A survey is processed on 1 March 2015; 2 condition details are added to an asset's condition data:</p> <p>Asset condition detail 1:</p> <p>Quantity = 110 Aggregated risk score = 4</p> <p>Asset condition detail 2:</p> <p>Quantity = 100 Aggregated risk score = 2</p> <p>On 1 March 2015, the aggregated risk score of the asset amounts to:</p> $(110 * 4) + (100 * 2) = 640$ $640/210 = \mathbf{3.05}$
Aggregated condition score	Displays the weighted average taken from the sum of observed conditions that are available at Condition details for a selected asset or building element. The value is taken over from the corresponding survey elements after a survey is processed in Condition Surveys .

Field	Description
	<p>Example</p> <p>Building element = brick wall.</p> <p>Total quantity (m2) = 90</p> <p>Required condition = 1</p> <p>10 m2 of the wall is in observed condition 2</p> <p>70 m2 of the wall is in observed condition 1</p> <p>10 m2 of the wall is in observed condition 4.</p> <p>Obviously, the largest part of the wall is in the required condition, so that must carry the most weight in the calculation:</p> <p>The wall's Aggregated condition score is calculated according to this formula:</p> $((10*2) + (70*1) + (10*4)) / 90 = 1.44$ <p>Since the wall's Required condition is 1, maintenance is not very urgent.</p>
	<div style="border: 1px solid #00a0e3; padding: 5px;"> <p> If the asset condition details are added or deleted, the aggregated condition score is recalculated based on the most recent Asset condition detail update date of the remaining Asset condition details.</p> </div>
Code	Enter a code for the condition data.
Description	Enter a description of the condition data.
Total quantity	This calculated, read-only field displays the sum of the quantities available for a selected asset/building element at Condition details .
Latest condition update date-time	Displays the date of completion of a maintenance activity on the selected condition detail.


Condition details fields

Field	Description
Asset condition	Enter the relevant asset condition to which you want to add details.
Unit of measurement	Select the relevant unit of measurement from the dialog box available in this field. The value entered in this field refers to the value in the Quantity field.


Field	Description
Quantity	<p>Enter the relevant quantity that applies to the building element.</p> <p>Whenever the quantity in this field is modified, the Quantity field on the building element in the Assets level and the Total quantity field in the Asset details level are updated.</p>
Aggregated risk score	<div data-bbox="602 470 1317 562" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">  The value entered in this field refers to the value in the Unit of measurement field. </div> <p>This calculated read-only field displays the weighted average taken from the risk scores and quantities that are available for the survey elements associated with the current asset condition details. The value is taken over after a survey is processed in Condition Surveys.</p> <p>Example</p> <p>After processing a survey, 2 survey elements are clustered into one building element: Partition wall. The unit of measurement is m2.</p> <p>Survey element 1: Quantity = 20 m2 and Risk score = 4</p> <p>Survey element 2: Quantity = 15 m2 Risk score = 2</p> <p>The aggregated risk score for the condition details is calculated as follows:</p> $(20 * 4) + (15 * 2) = 110$ $110 / 35 = \mathbf{3.14}$
Alternative classification	<p>If relevant, select a relevant alternative classification from the dialog box available in this field.</p>
Code	<p>Enter a code for the asset details.</p>
Comment	<p>If relevant, enter a comment on the condition details.</p>
Condition score	<p>Displays the latest condition score of the asset. This is the latest surveyed score, or if maintenance has taken place after the survey, the condition after the maintenance.</p> <p>Only the asset condition with the latest survey date is considered in the rest of Planon ProCenter , even if the latest update date is higher on an older asset condition.</p>

Field	Description
Expected condition after maintenance	Enter a condition score representing the asset's or building element's expected condition after maintenance has taken place.
Location	Enter a location that is relevant to the condition detail.
Description	Enter a relevant description for the condition details.
Observed condition before maintenance	Enter a condition score representing the asset's or building element's observed condition before maintenance has taken place.
Calculated condition before maintenance	This field displays the calculated condition score representing the asset's or building element's condition before maintenance has taken place.
Latest condition update date-time	Displays the date of completion of a maintenance activity on a condition detail.
Latest observed condition	Condition after maintenance of the asset.

Counter data fields

Field	Description
Code	In this field, enter a unique code that you want to assign to the counter.
Description	In this field, enter a relevant description of the counter.
Converted counter	This read-only field, which is not visible by default, displays the name and code of the counter after it has been converted to the Meters TSI.
<div style="border: 1px solid #00a0e3; padding: 5px; margin: 5px 0;">  For more information on converting counters created in the Assets TSI to the type used in the Meters TSI, refer to the Planon ProCenter - Functional Migration Guide. </div>	
Asset	This field displays the name and code of the selected asset.
Direction	In this field, indicate whether the counter is ascending or descending. In other words: whether it counts forward or backwards.
Minimum value	The minimum value allowed for the counter.

Field	Description
Maximum value	The maximum value allowed for the counter.
Increment size	The minimal difference required between two counted values. In other words: the quantities in which the counter is counting, integers or decimals. For example: if you type 1 in this field, the counter will count in units. The specified value should be larger than 0.
Unit of registration	In this field, specify the unit of registration used by the counter, for example miles, liters, cubic meters or pieces.
Consumption since last reset	This field displays the consumption since the counter was last reset. This field is automatically populated on the basis of the values entered at the Activities/registrations selection level.
Total consumption	The actual counter reading. This is the sum of all readings you have done. This field is automatically populated on the basis of the values entered at the Activities/registrations selection level.
Date-time of last reading	The date on which you last added a counter reading. In other words: the date of the last reading. This field is automatically populated on the basis of the values entered at the Activities/registrations selection level.
Last consumption value	This field is automatically populated with the last consumption value that was registered.
Image	In this link field you can create a link to a picture of the counter of the selected asset.
Comment	If relevant, enter a comment on the selected counter.
Threshold value	This field, which is not visible by default, can be used to enter the counter value after which a certain action should be taken. For example: if a fuel tank needs to be refilled while there is still a specific amount of fuel in the tank, you can enter a relevant counter value here. If this counter value is reached, it is time to refill the fuel tank. You can include this field in reports to analyze the fuel tank consumption. The values in the report will tell you when it is time to take action.

 For more information on making fields visible in a TSI, see [TSIs](#). For more information on creating report definitions, see [User Report Definitions](#)

Counter reading data fields

Field	Description
Counter	The name of the selected counter.
Date registration	The date and time of the current reading.
Initial value	<p>This field is automatically populated with the counter's last value. In other words: the previous counter value that was read and registered. In a continuous sequence of counter readings, the start value of a counter reading is the same as the previously registered value.</p> <p>You can reset a counter by manually entering the new value in this field and also entering the new value in the Registered value field. For example: if a fuel tank with a descending counter is refilled, you can enter the new quantity of fuel in this field. Any subsequent counter readings will go backwards from this point until the tank is refilled again.</p>
Registered value	The counter value you have just read.
Consumption	The difference between the initial value and the registered value is the asset's consumption.
Comments	This field can be used to enter a comment on the reading.

Purchase fields

Field	Description
Asset	This field is automatically populated with the code and description of the selected asset.
Investment number	In this field, you can enter an investment number for the selected purchase.
Code	This field is automatically populated with a code for the asset purchase. This code can be modified.
Description	In this field, you can enter a description of the asset purchase.
Statuses of asset purchases	Select the status of the purchase. There are three statuses available: Reported , Being depreciated and Disinvested .
Entry date purchase	This field is automatically populated with the date on which you entered the purchase.

Field	Description
Purchase date	The date the asset was purchased.
Supplier	This field is automatically populated with the supplier of the asset. You can, however, change this by selecting another supplier from the pick list, containing addresses from the Addresses TSI.
Quantity	By default, the value 1 is entered in this field. You can overwrite this value if it concerns a multiple asset.
Price per piece	The price per item can be entered in this field.
VAT tariff	In this field you can select a relevant VAT tariff from a pick list.
Costs excl. VAT	This read-only field displays the total costs of the purchase excluding VAT.
Costs incl. VAT	This read-only field displays the total costs of the purchase including VAT.
Cost center	In this field you can select a relevant cost center for the purchase.
Start date depreciation	In this field you can enter a date on which the depreciation of the asset should start.
Depreciation percentage	In this field, you can enter the depreciation rate of the selected asset as was entered in the Assets selection level. This is an information only field.
Residual value per piece	In this field, you can enter the residual value of the asset. This is an information only field.
Valuation date	The date when the purchase is valued.
Valuation status	The status of the purchase at the moment of valuation, for instance: good or poor.
Valuation value per piece	The value per item at which the purchase has been assessed.
Total valuation value	The data in this field is automatically calculated. The formula for the calculation is: items * valuation value per piece.
Assets account	In this field you can type the account number against which the asset is to be booked. This number can be selected from a pick list.

Field	Description
Depr. assets account	In this field you can enter the account number against which the depreciation of the asset is to be booked. This number can be selected from a pick list.
Depr. costs profit-loss account	In this field you can enter the profit & loss account against which the asset is to be booked. The account number can be selected from a pick list.
Assets account, purchases	In this field you can enter the account number of the assets account corresponding with the purchase. This number can be selected from a pick list.
Disinvestment assets account	Here you can enter the account number of the assets account for disinvestments. This number can be selected from a pick list.
Repl. reserv. assets account	Here you can enter the account number of the asset account for replacements. This number can be selected from a pick list.
Warranty period	The warranty period can be entered in this period field.
Warranty end date	The date the warranty expires can be entered in this field.

Related assets - fields

Field	Description
Asset 1	Select an asset from the list that you want to relate to a second asset.
Asset 2	Select a second asset from the list to which you want to relate the first asset.
Asset relation type	Select the relevant relation type from the list.

Replacement fields

Field	Description
Date	By default, this field is populated with the system date. You have to change this to the

Field	Description
	date on which replacement of the selected asset is due.
Description	In this field, enter a description for the replacement of the asset.
Date of costs	Use this field to select the date on which the costs per item were entered or were indexed for the last time.
Quantity	In this field you can fill in the number of items that replace the old asset.
Costs per piece	In this field you can enter the purchasing costs of the asset that is to be replaced.
VAT tariff	In this field you can select a relevant VAT tariff applying to the costs per item.
Costs excl. VAT	This calculated field displays the total amount of the replacement costs excluding VAT.
Costs incl. VAT	This calculated field displays the total amount of the replacement costs including VAT.

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